



G1 723

4

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : FRANZ VOSSEN

Docket No.: 00-601

Serial No.: 09/647,699 ✓

Filed : September 29, 2000

For : APPARATUS FOR REMOVING BROKEN-OUT
PIECES FROM A SHEET OF MATERIAL
OR THE LIKE

900 Chapel Street
Suite 1201
New Haven, CT 06510-2802

RECEIVED
EPC-6 2000
TECHNOLOGY CENTER 3700

INFORMATION DISCLOSURE STATEMENT

Hon. Commissioner of Patents and Trademarks
United States Patent & Trademark Office
Washington, D.C. 20231

Dear Sir:

In accordance with the requirements of 37 C.F.R. 1.97 and 1.98, Applicant hereby submits the prior art documents listed hereinbelow, copies enclosed, which prior art was cited in the corresponding International Search Report.

- (1) International Publication No. WO 97/30829, published August 28, 1997. This reference discloses a device for removing pre-cut portions of a material sheet comprising scores or the like.

(2) U.S. Patent No. 5,181,640 for APPARATUS FOR REMOVING BREAK-OUT PORTIONS FROM A SHEET OF MATERIAL OR THE LIKE, By Franz Vossen et al., Patented January 26, 1993. This reference discloses an apparatus for removing break-out portions and in particular waste pieces from a sheet of material which contains blanks or the like and which rests on a break-out surface in such a way that the break-out portion extends over an aperture in the break-out surface and is pressed downwardly through the aperture under the pressure of at least one break-out member, in particular a break-out pin. The actual reference cited was the European equivalent; namely, European Patent 0 446 702, published September 18, 1991, however, since the European Patent is equivalent to the above-identified U.S. Patent for convenience the U.S. Patent is enclosed.

(3) PATENT ABSTRACTS OF JAPAN, Japanese Publication No. 08294898, published November 12, 1996. The purpose of this reference is to make a certain punching operation even in a punch-off line which leaves a large residual portion and remove the waste produced from the punching to the outside by reserving a gap between the foremost of a support plate and the punch-off line, forming punch-off pieces in their parts supported by the support plate in the shape of a thin

sheet, and installing it protrusively at the upper die base board along the punch-off line.

- (4) U.K. Patent Application 2 300 377, published November 6, 1996. This reference discloses a waste removal apparatus for use in removing unwanted or waste material from a blank or sheet thereof, comprising a pin P with a point 2' at one end thereof and a first portion 1 formed with a slot 1' extending axially along at least part of its length.
- (5) U.S. Patent No. 4,985,012 for APPARATUS FOR STRIPPING SCRAP FROM DIE CUT BLANKS, By Carl R. Marschke, Patented January 15, 1991. This reference discloses an apparatus for stripping the scrap portion from a die cut blank including a stripper pin carrier providing a pattern of stripper pins supported in a resilient compressible material layer in which the stripper pins are demountably embedded.
- (6) European Patent Application 0 641 632, published March 8, 1995. This reference discloses a waste removing apparatus, for use in a punching machine for manufacturing a carton, for separating from each other a waste region of a sheet and a product region of the sheet having a punching line comprising a cut-out portion and a remaining portion formed

thereon and inserted between an upper die and a lower die which are approached to each other, by pressing down the waste region and tearing the remaining portion by means of a punching member projecting downward from one of the dies so as to remove the waste region from the sheet.

- (7) U.S. Patent No. 5,065,926 for TELESCOPIC TOOL FOR STRIPPING WASTE WITHIN A SHEET PROCESSING MACHINE, By Marcel Yerly, Patented November 19, 1991. This reference discloses a telescopic tool used for stripping waste from a cut sheet of material in a waste stripping station comprising a hollow cylindrical body which receives a pin having a portion extending out of a bore of the body with a tip for engaging the waste material. The actual reference cited was the European equivalent, namely, European Patent No. 0 391 299, published October 10, 1990; however, since the European Patent is equivalent to the above-identified U.S. Patent for convenience the U.S. Patent is enclosed.
- (8) U.S. Patent No. 4,033,240 for ROTARY STRIPPING WHEEL, By Clovis F. Deslauriers, Patented July 5, 1977. This reference discloses a plurality of transversely adjustable rotary stripping wheels of general disc-like configuration

for use in a stripping machine for removing automatically the waste material from die cut blanks.


- (9) German Patent Document 41 03 339, published September 3, 1992. Although the reference is in the German language, the drawings are believed to be clear.
- (10) PATENT ABSTRACTS OF JAPAN, Japanese Publication No. 07132497, published May 23, 1995. The purpose of this reference is to punch the residue of sheet material positively regardless of the shape and size by additionally providing an elastic piece protruding inward of the hole of a female mold so as to be positioned inside of the contour of the residue in the case of piercing a punching pin through the hole of the female mold to punch the residue interposed in between.

The undersigned submits the above-identified references for independent consideration by the Examiner and does not make any admission that these references are or are not material to the present invention or that these references are or are not prior art with respect to the present invention.

If any charges are required in connection with this submission, it is requested that they be charged to Deposit Account No. 02-0184.

Respectfully submitted,

FRANZ VOSSEN

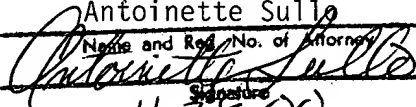
By 
Robert H. Bachman
Attorney for Applicant

Area Code: 203
Telephone: 777-6628
Telefax : 865-0297

Date: November 28, 2000

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231

on November 28, 2000
(Date of Deposit)

Antoinette Sull
Name and Reg. No. of Attorney

Signature
11-28-00
Date of Signature